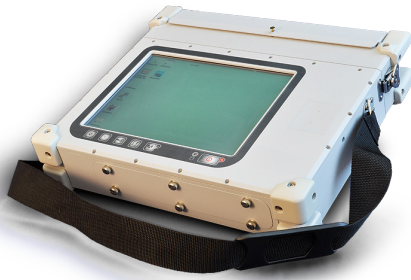


PMA-2100

Portable Maintenance Aid



The PMA2100 is a portable, ruggedized, and multi-instrument test system. It incorporates a tablet PC and synthetic instrument technology enabling customers to automate functional testing. Easily configured and customized for specific applications, it reduces dependence on large numbers of individual, general purpose test equipment for OEM service, depot, I-level, and field/O-level operations, reduces equipment downtime (MTTR) and cuts the cost and logistical burden associated with No Fault Found (NFF) Returns.

Key Features

- Microsoft Windows® 7 tablet PC computer
- Multiple instrument measurement functionality—DMM, audio, function generator, optional baseband digitizer, optional RF signal generation and analysis
- Optional digital serial bus control and communication—RS-232, RS-422, RS-485, MIL-1553 and/or ARINC 429
- Configurable and expandable—features two cPCI/cPCIe slots for instrumentation
- Removable, field replaceable, and customizable signal interface units (PODs)
- Manual, semi-automated, or fully automatic GO/NO-GO test
- Open software architecture
- Small footprint, portable instrument weighing under 25 pounds
- Ruggedized, durable, and weatherproof—MIL-PRF-28800F Class 2, IP67 Watertight
- AC, DC, or battery power—two replaceable, rechargeable, Li-Ion battery packs

Product Information

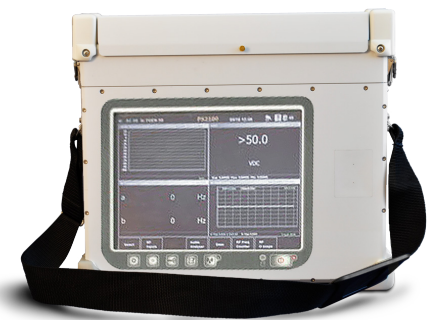
Today, military branches face challenging requirements to improve operational uptime, minimize MTTR (mean time to repair), and minimize their test equipment footprint. Commercial manufacturers of the equipment used by the military have a similar vested interest to both ensure the functionality of the systems deployed in the field and to enable streamlined maintenance operation and rapid repairs when necessary.

New military platforms, upgrade programs, and service-life extensions have resulted in a proliferation in the number of Line Replaceable Units (LRUs) within aircraft, vehicles, communications equipment, avionics, weapons systems, and other electronic systems that must be functionally tested as part of mission support.

These challenges are straining the bounds of aging I-level and O-level test systems as well as the myriad of conventional portable instruments used by field maintenance and repair professionals.

The PMA-2100 presents an ideal solution to these challenges by integrating multiple test-instrument functionality, the processing and communication power of a Windows® 7-based tablet PC, and ruggedized packaging into a portable test system.

It can be configured and customized for multiple test applications with programmed synthetic measurement applications, installed signal generation/acquisition hardware, field replaceable POD's, different signal interfaces, and automation software.



The PMA-2100 represents an ideal integration platform to streamline field service testing for manufacturers and field maintenance/repair operations. It is equally capable of performing manual or semi-automated measurements for field diagnostics or executing fully-automated functional tests.

It replaces multiple individual instruments by incorporating both signal generation and analysis for DC to RF signals and even provides a wide range of digital serial bus types within a single, self-contained, and ruggedized instrument platform.

Manual, pre-configured measurement parameters or fully-automated testing with stimulus, analysis, and comparison to GO/NO-GO limits can be performed. In addition, the PMA-2100 distinguishes itself from conventional portable test instruments because the system can be used as a memory loader verifier, updating the software on LRUs and then performing a quick but comprehensive functional test to validate system readiness.

Utilizing the laptop computer functionality, test results can be seamlessly

ASTRONICS
TEST SYSTEMS

Product Information

continued

communicated to a Computerized Maintenance Management System (CMMS). Product documentation, manuals, and specifications can be loaded into the PMA-2100, ensuring that all the information required for repair or troubleshooting is immediately available at the point of service in the field. Interactive Electronic Technical Manuals (IETM's) can likewise be loaded or developed to further speed and simplify maintenance and repair operations.

Once configured and customized for specific test requirements, the PMA-2100 can speed and streamline maintenance, test, and repair operations. It shrinks the test equipment footprint by reducing the number of individual pieces of test equipment that must be inventoried, maintained, and repaired.

Additional benefits of applying an advanced synthetic field test instrument such as the PMA-2100 include improved operational readiness, faster repairs, and a reduction in the costs and logistical burden stemming from NFF (no fault found) returns.

Flexibility to test a wide range of MIL/Aero systems in different test environments

The PMA-2100 is a revolutionary portable test system packaging an automated functional test system into a man-portable, ruggedized, and weatherproof instrument that can be practically deployed in the field, on the flight line, or on board a ship.

It enables the maintenance and repair technician to replace a laptop computer, tech manuals, and groups of single purpose, manual test instruments with an integrated and complete test system solution.

Test Setting/Level of Maintenance

- OEM Field Service Centers
- Intermediate (I-Level)
- Field (O-level)

Test Applications:

- LRU / Black Boxes
- Radios
- Avionics
- Communications Systems
- Aircraft, Vehicle, or Naval Systems

Incorporating signal generation, signal analysis, digital serial bus communication, LRU/DUT control, and automated test



PMA-2100 with docking station makes moving from O-Level to I-Level very easy.

capability into a single package delivers fast, reliable, and comprehensive functional test for a wide range of radios, LRUs, or electronic systems.

For OEM service centers or I-level repair locations where the density or diversity of signal interfaces or need for switching go beyond a base POD, the PMA-2100 can be easily connected to a custom, purpose-built docking station for a complete application solution.

Thus, the PMA-2100 can eliminate many of the challenges associated with supporting aging test equipment and older bench top testers.

Configure and customize a PMA-2100 to your application requirements

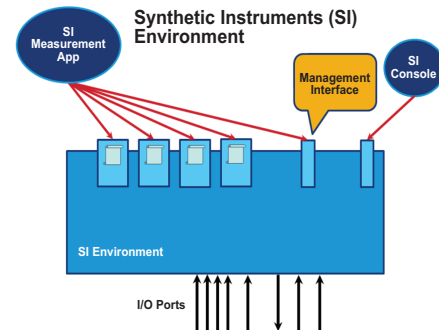
The PMA-2100 incorporates the flexibility of a modular test system in order to meet diverse application requirements. A range of factory options enable configuration of the PMA-2100 with specific test instrumentation, digital bus support, and selected, durable, signal interface connections.

If further customization is required, the base unit incorporates two cPCI/cPCIe expansion slots, which can be used with compatible third-party conduction-cooled test instrumentation.

Secondly, the design incorporates configurable, customizable, and field replaceable POD's that dock with the base unit and provide housing for test instrumentation, signal conditioning, and durable signal interfaces.

Finally, an open software architecture enables users to develop their own software applications within the synthetic instrument environment.

The SI environment of the PMA-2100 consists of three components: Application, Engine, and Hardware. It is not limited to operation just within the PMA-2100, meaning it can interface with external devices as well. Commercial test application software,



The PMA-2100's SI environment makes it possible to interface with external devices.

third-party custom applications, or Astronics Test Systems developed software can likewise be utilized.

As new LRUs, systems, or programs are deployed, the instrument can be further upgraded with additional software, different signal acquisition hardware, new PODs, and even a custom docking station. This limits the proliferation of test equipment, preserves your platform and TPS investment, and speeds the process of deploying new programs.

Astronics Test Systems has more than 50 years' experience addressing the needs of



The PMA-2100's pod interface provides extensive flexibility that can make your test system even more efficient.

those who manufacture, operate, or repair equipment and systems used in military and aerospace applications. Our team of electronic test experts are ready to provide the technical guidance and support you need to configure or customize a PMA-2100 to meet your specific application needs, including hardware integration, custom POD development, and/or software integration.

Reduce Equipment Downtime and MTTR

Once a PMA-2100 has been configured in software and hardware, the result is a powerful and flexible test system that speeds repetitive maintenance evaluations, facilitates rapid functional test evaluations, and serves as a communication platform for documentation, diagnostic information, and test results.

Product Information

continued

Because the PMA-2100 integrates multi-instrument functionality, including stimulus and response, for a wide variety of analog, digital, and RF signal types and interfaces, it helps you save time relative to finding and operating groups of conventional portable instruments to perform comparable testing.

By virtue of its programmability, you can easily run automated test routines, evaluate multiple measurement parameters to GO/NO-GO limits, and electronically communicate test data into maintenance and repair databases.

Technicians or offsite engineering experts can remotely control tests and then communicate response data or test results via convenient WIFI or Ethernet interfaces for remote viewing or storage within a Computerized Maintenance System (CMS).

Reduce the costs and logistics burden of NFF returns

No Fault Found (NFF) returns are a challenge for both manufacturers and the various branches of the military that operate, maintain, and repair equipment. NFF returns can create substantial

logistical costs in terms of incremental spares inventory, shipping costs, and replacement costs for fully functional equipment.

Because test with conventional portable test tools in the field or on the flight line can be time consuming or incomplete, often the solution for field technicians is just to replace a suspected LRU.

The PMA-2100 mitigates these challenges by enabling fast, reliable, and fully comprehensive GO/NO-GO functional tests to be performed on an LRU in the field or on-platform—typically within minutes—before an LRU is removed from service. Thus, the PMA-2100 mitigates the costs and logistical burden associated with NFF or RETOK (Re-test OK) system and equipment returns.

Seamlessly access, update and communicate maintenance and test data

The PMA-2100 is an ideal platform to host an IETM and to serve as a Data Loader/Data Verifier for a variety of avionics LRUs, military radios, and other electronics systems.

Quick and comprehensive functional tests can verify the operational status of an LRU after a repair or software update performed

in the field. In addition, the PMA-2100 can be programmed to create electronics records of test results, update CMS, or communicate fault data directly to the manufacturer.

With standard wireless functionality, technicians do not have to wait to connect to Ethernet in order to transmit test data, report problems, or to enable remote control by off-site experts when troubleshooting a complex repair.

Key Benefits

- Speed and streamline maintenance/repair operations
- Automate fast and comprehensive LRU functional test
- Reduce test equipment footprint—replace multiple individual portable test instruments
- Reduce equipment downtime and MTTR
- Mitigate NFF returns and associated costs/logistics burdens
- Seamlessly communicate test and maintenance data to a CMS
- Deploy a common solution for OEM service, I-level, and field test of LRUs
- Easily configure, customize, or expand the system to meet varying test needs

Specifications

Note: The Astronics Test Systems policy is one of continuous development and improvement. Consequently, the equipment may vary in detail from the description and specifications in this publication.

DMM

AC Amps

Range 0.01 to 1 A

Accuracy

- 0.4% of reading $\pm 250 \mu\text{A}$ @ non-calibration frequency
- 0.125% of reading $\pm 200 \mu\text{A}$ @ calibration frequency

Frequency

- 50 Hz to 1 kHz

Range 0.1 to 10 A

Accuracy (across entire range)

- 1% of reading $\pm 50 \text{ mA}$
- 1% of reading $\pm 30 \text{ mA}$ @ calibration frequency

Frequency

- 50 Hz to 1 kHz

Burden Voltage

- 0.075 V/A

DC Amps

Range 0 to 1 A

Accuracy

- 0.1% of reading $\pm 60 \mu\text{A}$

Range 0 to 10 A

Accuracy

- 0.2% of reading $\pm 30 \text{ mA}$

Burden Voltage

- 0.075 V/A

Resistance

Range 0 to 10 k Ω

Accuracy

- 0.1% of reading $\pm 0.5 \Omega$

Range 0 to 10 M Ω

Accuracy

- 0.1% of reading $\pm 1 \text{ k}\Omega$

AC Volts

Range 0.03 to 10 V

Accuracy (across entire range)

- 0.5% of reading $\pm 50 \text{ mV}$ @ non-calibration frequency
- 0.5% of reading $\pm 30 \text{ mV}$ @ calibration frequency

Minimum Discernible Level

- 5 mV

Frequency

- 50 Hz to 1 kHz

True RMS

- Yes

NMR

- 70 dB

Input Resistance

- 10 M Ω $\pm 5\%$

Input Impedance

- 15 M Ω $\pm 5\%$

Specifications

continued

Range 2 to 250 V

(500 V maximum option available)

Accuracy (across entire range)

- 1% of reading ± 500 mV

Frequency

- 50 Hz to 1 kHz

True RMS

- Yes

NMR

- 70 dB

Input Resistance

- 10 M Ω $\pm 5\%$

Input Impedance

- 10.1 M Ω $\pm 5\%$

Crest Factor

- 4:1

DC Volts

Range 0 to 10 V

Accuracy

- 0.5% ± 10 mV

Input Resistance

- 10 M Ω $\pm 5\%$

Input Impedance

- 15 M Ω $\pm 5\%$

NMR

- 70 dB

CMR

- 140 dB

Range 0 to 250 V

(500 V maximum option available)

Accuracy

- 0.1% of reading ± 200 mV

Input Resistance

- 10 M Ω $\pm 5\%$

Input Impedance

- 10.1 M Ω $\pm 5\%$

NMR

- 70 dB

CMR

- 140 dB

Radio Frequency (RF)

Function Generator

Frequency Range

- Sine: 0 to 100 MHz
- Square/Triangle: at selected frequencies

Frequency Resolution

- 1 Hz

Bandwidth

- 100 MHz

Maximum Output Level

- 10 V_{pk-pk} 50 Ω

Offset Level

- ± 5 V

Spurious Harmonics

- -30 dBc

Spurious Non-Harmonics

- -50 dBc

RF Generator

Frequency Range

- 2 MHz to 3,000 MHz

Resolution

- 1 Hz

Accuracy

- Same as timebase ± 1 Hz

Output Level Range

- 0 to -60

Output Level Accuracy

- ± 2 dB

Spurious Harmonics

- -30 dBc

Spurious Non-Harmonics

- -40 dBc

AM

Modulation Frequency

- 10 Hz to 20 kHz

Modulation Frequency Accuracy

- Timebase ± 2 Hz (300 Hz to 3 kHz BPF)

Modulation Range

- 0 to 99%

Modulation Accuracy

- 10% of setting, 150 Hz to 5 kHz rate, 10% to 90%, >20 kHz LP

Modulation Resolution

- 0.1%

Total Harmonic Distortion

- 3% (20% to 90% Mod, 1000 Hz rate, 300 Hz to 3 kHz BPF, <1.8 GHz)
- 4% (20% to 90% Mod, 1000 Hz rate, 300 Hz to 3 kHz BPF, <2.5 GHz)

FM

Modulation Frequency

- 10 Hz to 20 kHz

Modulation Frequency Accuracy

- Timebase ± 2 Hz (300 Hz to 3 kHz BPF)

FM Deviation Range

- 0 to 100 kHz

FM Deviation Resolution

- 1 Hz

FM Deviation Accuracy

- $\pm 10\%$ (2 kHz to -50 kHz deviation, 150 Hz to 5 kHz rate, 300 Hz to 3 kHz BPF)

Total Harmonic Distortion

- 6% (1000 Hz rate, >2 kHz deviation, 300 Hz to 3 kHz BPF, <2.5 GHz)

RF Frequency Meter

Frequency Range

- 2 MHz to 3000 MHz

Frequency Resolution

- 2 Hz Resolution

Frequency Accuracy

- Timebase ± 2 Hz

Power Input Range

- 0 dBm to -40 dBm

RF Power Meter

Frequency Range

- 2 MHz to 3,000 MHz

Power Range

- 0 dBm to -60 dBm

Accuracy

- ± 3 dB

RF Modulation Analyzer

AM

Meter Range

- 5 to 100%

Resolution

- 1 %

Accuracy

- $\pm 5\%$ of reading, 1 kHz rate, 30% to 90% modulation, 3 kHz LPF

Specifications

continued

FM

Meter Deviation Range

- 500 Hz to 100 kHz

Resolution

- 1 Hz Resolution

Accuracy

- 10% (1 kHz to 100 kHz Deviation, 150 Hz and 1 kHz Rate)
- 5% (2 to 10 kHz Deviation, 150 Hz and 1 kHz Rate)

Spectrum Analysis

Frequency Range:

- 2 MHz to 3,000 MHz

Frequency Resolution:

- 2 Hz Resolution

Frequency Accuracy:

- Timebase ± 2 Hz

Span:

- 22 MHz down to 9.76 kHz (Selectable 22 MHz, 10 MHz and then divide by 2)

Displayed Average Noise Level (DANL): (9.76 kHz span, 16K FFT, Kaiser Filter)

- -130 dBm <1.5 GHz
- -120 dBm >1.5 GHz

Features

- FFT Points: 256 to 16K
- Spectrograph Plot
- Filter Types: Bartlett Hann, Blackman, Blackman Harris, Blackman Nuttall, Flat Top, Gaussian, Hamming, Hann, Kaiser, Lanczas, Nuttall, Rectangular, Sine, Triangle, Tukey

Audio

Analog Input

- Microphone

Input Voltage

- 350 mV_{rms}

Impedance

- 4.7 k Ω

Frequency

- 20 Hz to 20 kHz

Frequency Accuracy

- 50 ppm ± 1 Hz

Sample Rate

- 44100 Hz

Level Accuracy

- 7% (50 to 20 kHz)

Analog Output

Headphone

Output Voltage

- 350 mV_{rms}

Impedance

- 4.7 k Ω

Frequency

- 20 Hz to 20 kHz

Frequency Accuracy

- 50 ppm ± 1 %

Sample Rate

- 44100 Hz

Flatness (40 to 15 kHz)

- <1 dB

Level Accuracy

- 10% typ

Distortion

- 4 to 30% widespread

Serial Bus

RS-232; RS-422/485

- Baud rates: 600, 1200, 2400, 4800, 19200, 38400, 57600
- Parity: None, Even, Odd
- Data bits: 7, 8
- Stop bits: 1, 2
- Maximum data buffer: 127 bytes
- Parity Error Char: '?' – ASCII code 0x3F
- RS-232 Drive voltage: ± 8 VDC
- Option for RS-422/485 on common or separate DB9 (Y-Cable) Connector

MIL-STD-1553 A/B (optional)

- 2 Dual Redundant Channels
- Transformer and/or Direct Coupled
- BC/MT or Multi-RT/MT per Channel
- BC Disable for RT Only Applications
- TX Inhibit for MT Only Applications

ARINC-429 (optional)

- 4 Receive Channels
- 2 Transmit Channels
- High/Low Speed Operation

General Specifications

CPU

Operating System

- Windows® 7 Professional operating system

Display

- 12.1 in SVGA, 1000 nits

User Interface

- 5 wire resistive touch screen

Controls

- Brightness, Task Manager, Function Home, 802.11 On/Off, Power

Interfaces

- (Up To 4) USB 2.0, VGA, Ethernet, Audio, RS-232, RS-422, RS-485

Processor

- Intel Atom N2800 (2 x 1.86 GHz)

Chipset

- Intel NM10

Memory

- 2 GB SO-DIMM (4 GB Max) DDR3 1066 MHz

Storage

- 80 GB removable solid state drive (180/240 GB Optional)

Network

- 802.3 10/100/1000 BASE-T, 802.11B/N

Internal

- Two 3U cPCI/cPCIe/PXI Slots (one used for synthetic instrumentation)

External

- XXX-Pin Blade connector for specific POD or docking station solutions

AC Input Power

(AC/DC Charger Unit)

AC Input Power

AC Input Voltage

- 90 to 264 VAC, 47 to 63 Hz

Humidity

- 10 to 95% RH, non-condensing

Altitude

- 3000 m

Operating Temperature

- 0° C to +55° C

Storage Temperature

- -20° C to +80° C

EMC

- EN61000-3-2 class A

Safety

- EN 60950, UL 60950, CSA 22.2 No. 60950 per cUL, CE Mark

Specifications

continued

DC Input Power

DC Input Voltage Range

- 10 VDC to 30 VDC
- 12 A max current draw
- Max power consumption: 120 W (50 W typ)

Battery

Battery Type

- Two ME202CJ Lithium Ion 78.8 Wh battery packs

Note: Battery must not be subjected to temperatures below -20° C, nor above +60° C

Battery Operation Time

- 3.5 hrs continuous use, 100% duty cycle at full power

Note: Battery to be charged at temperatures between +0° C and +50° C

Environmental

Temperature

- Storage: -30° C to 71° C

Note: Battery must not be subjected to temperatures below -20° C, nor above +60° C

- Operation: -10° C to 55° C

Note: Battery to be charged at temperatures between 0° C and +50° C

Usage Environment

- Instrumentation CAT I
- Instrumentation CAT II

Pollution degree 2 is available with a special POD configuration

MIL-PRF-28800F Class 2

Altitude

- 4,600 m max (15,092 ft)

Shock, Functional

- 30 G

Vibration

- Random 10 to 500 Hz

EMC

- EN61326:2006

Humidity

- 95% max non-condensing

Bench Handling

Water Tight IP67

Ingress Protection

Salt fog

Fungus resistance

Mechanical

Overall Dimensions

- 17.5" H x 14.5" W x 3.5" D

Weight

- <25 lbs including protective covers and accessory bag

Ordering Information

P2X-ABDCE-FGHIJKLMNO : PMA-2100

Portable Maintenance Aid



X = System components for configuration

ABCDE = PMA2100 base unit configuration and options

FGHIJKLMNO = POD selection and configuration options

Instructions:

Step 1: To create the first part of the part number, replace the "X" with the application code(s) for desired system components from the table below.

SYSTEM COMPONENTS (X)		
Code X	Application Code Description	P/N
1	PMA2100 complete test system includes base unit and POD, Windows® 7 Tablet PC, batteries, AC power supply, carrying strap, protective faceplate and pouch, user manual and CD	Base: 924067 POD: 92470
5	PMA2100 base unit with options, no measurement functionality, no POD, Windows® 7 Tablet PC, batteries, AC power supply, carrying strap, protective faceplate and pouch, user manual and CD	924067
9	Configured POD only; No PMA2100	92470

Ordering Information

continued

Step 2: To create the second part of the part number, replace the “-ABCDE” with the appropriate application codes for the base options from the table below. Use “0” for none or no base instrument.

BASE INSTRUMENT OPTIONS (-ABCDE)		
Code A Slot 1 Instrumentation and Cabling	Application Code Description	P/N
0	None or no base instrument	N/A
1	Digitizer (Note: For RF Deck only; no separate D-A or A-D capability)	924069
Code B Slot 2 Instrumentation and Cabling	Application Code Description	P/N
0	None or no base instrument	N/A
1	RF Deck (Requires Option A-1 above)	924068
Code C Other Base Unit Installed Instrumentation/Options	Application Code Description	P/N
0	No additional base unit instrumentation or no POD	N/A
1	MIL-STD-1553A/B & ARINC-429 serial bus combination	924081
2	MIL-STD-1553 A/B serial bus only	924082
3	ARINC 429 serial bus only	924083
Code D Hard Drive Option (must select hard drive with base unit configurations)	Application Code Description	P/N
0	No base instrument (only available if X=9, no base unit)	N/A
1	80 GB Hard Drive	924110
2	180 GB Hard drive	924111
3	240 GB Hard drive	924112
Code E Unused; Reserved for future options	Application Code Description	P/N
0	None or no base instrument	N/A

Step 3: To create the third part of the part number, replace the “-FGHIJKLMNO” with the appropriate application code(s) for the base options from the table below. Use “0” for none or no base instrument.

POD OPTIONS (-FGHIJKLMNO)		
Code F POD type and faceplate options	Application Code Description	P/N
0	No POD	N/A
1	Base standard POD, includes SVGA connector, cabling, and faceplate	POD: 924070 Cabling: 924073 Faceplate OEM: 430-3639
Code G RF POD cabling (must match base unit functionality)	Application Code Description	P/N
0	No RF Deck or no POD	N/A
1	RF POD connectors and cabling (required if B=1)	924074
Code H DMM Module	Application Code Description	P/N
0	No DMM or no POD	N/A
1	DMM Module	924071

Ordering Information

continued

POD OPTIONS (FGHIJKLMNO) CONTINUED		
Code I Unused; Reserved for future options	Application Code Description	P/N
0	None or no base instrument	N/A
Code J Serial Bus Option (select one of the single or combination serial buses below)	Application Code Description	P/N
0	No Serial Bus or no POD	N/A
1	RS-232/RS-422/RS-485 with shared single DB9 connector	924077 and 924078 (see below)
2	RS-232/RS-422/RS-485 with separate DB9 connectors (internal Y cable); Note: Not available with CAN Bus K-1	924077 and 924080 (see below)
3	RS-232	924077
4	RS-422/RS-485 with shared single DB9 connector	924078
5	RS-422/RS-485 with separate DB9 connectors (internal Y cable)	924080
Code K Unused; Reserved for future options	Application Code Description	P/N
0	None or no base instrument	N/A
Code L Additional Connectors/Interfaces	Application Code Description	P/N
0	None or no POD	N/A
1	DB25 I/O connector and cabling (required for MIL-STD-1553A/B and ARINC-429 bus options in base unit [C-1, -2, or -3])	924072
Code M Audio	Application Code Description	P/N
0	No audio cabling /signal conditioning or no POD	N/A
1	Audio connectors and signal conditioning	924076
Code N Unused; Reserved for future options	Application Code Description	P/N
0	None or no base instrument	N/A
Code O Unused; Reserved for future options	Application Code Description	P/N
0	None or no base instrument	N/A

Part Number Ordering Examples:

P21-11110-1110101100	PMA-2100 and POD: includes PS1100 base unit and POD Base Unit Options: Digitizer, RF Deck, 80-GB Hard-drive, MIL-STD-1553A/B & ARINC-429 Serial Bus POD Options: RF Connector, DMM, RS-232/RS-422/RS-485, DB25 Connector, Audio
P25-11230-0000000000	PMA-2100 only, no POD: includes PS1100 base unit Base Unit Options: Digitizer, RF Deck, MIL-STD-1553A/B serial bus, upgraded 240-GB Hard Drive.
P29-00000-1110101100	Configured POD for PMA2100 only; No base unit POD Options: RF Cabling, DMM, RS-232/RS-422/RS-485, DB25 Connector, Audio

Ordering Information

continued

Accessories and Spares

924113 : ME202CJ Spare Battery Kit (requires qty. 2 per instrument)

924110 : Spare 80 GB hard drive

924111 : Spare 180 GB hard drive

924112 : Spare 240 GB hard drive

